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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,117	07/24/2001	Takayuki Sato	VN-0139US	8778
21874	7590	02/25/2004		
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER LAM, DANIEL K	
			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 02/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,117

Applicant(s)

SATO, TAKAYUKI

Examiner

Daniel K Lam

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-13, 15-18, 20-22, 24-27, 29-31 and 33-36 is/are rejected.
- 7) ☒ Claim(s) 5, 10, 14, 19, 23, 28, 32 and 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 4.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is objected to because it is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title of the invention, "Network Administration Apparatus, Network Administrating Program, Network Administrating Method and Computer Network System", only partially indicates the current invention which also utilizes VLAN technology to administrate networking system and devices, as claimed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1, 4, 6, 7, 9, 11, 13, 15, 16, 18, 20, 22, 24, 25, 27, 29, 31, 33, 34, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Pat. No. 6,223,218 issued to Iijima et al.

Regarding claims 1, 11, 20, and 29, while patenting the systems and methods for automatically setting VLAN configuration information, Iijima et al. discloses a apparatus, a program, a method, and a system for administrating networking devices comprising:

- a) VLAN detailed information 19, which is stored in the database 11 (VLAN information database), comprises VLAN groups VLAN-A 191, VLAN-B, VLAN-C, etc (one or more VLAN groups) to which device IDs of switching hubs, SWITCHING HUB-A1 196 and SWITCHING HUB-A2 197 are stored (one or more device identifying information respectively specifying); see figures 2 and 3, col. 12, line 60 to col. 13, line 4, and col. 13, lines 13-15.
- b) A VLAN ALTERATION REQUESTING RECEIVING SECTION 18 receives device ID from networking device (a receiving unit operable to receive device identifying information); see fig. 1 and col. 11, line 59 to col. 12, line 5.
- c) A DATABASE UPDATE SECTION 16 and a DATABASE WRITING SECTION 13 write and update the received VLAN information, including device ID, into the DATABASE 11 (a database updating unit operable to store said received device identifying information); see fig. 1, and col. 12, lines 5-10.
- d) A VLAN REMOVE UPDATE REQUEST EDITING SECTION 14 and a VLAN REMOTE UPDATE REQUEST TRANSACTION SECTION 17 assign and send the

VLAN configuration information to the networking device (a setting unit operable to assign said VLAN group to said network device); see fig. 1, and col. 12, lines 21-25.

Regarding claims 4, 13, 22, and 31, in addition to disclose the limitations regarding claims 1, 11, 20, and 29 discussed in the previous paragraphs, Iijima et al. further discloses the limitations that, if an alternation request coming from a device that is already belong to an existing VLAN group, the device is assigned to the existing VLAN group (receiving unit receives said device identifying information of said network device, which belongs to a default VLAN group in said VLAN information database, from said network device, and said setting unit assigns, in a case where said device identifying information received by said receiving unit is included in said one or more units of device identifying information stored in said VLAN information database, said VLAN group corresponding to said received device identifying information to said network device of said default VLAN group); see fig. 4 reference A6, and col. 22, lines 36-46.

Regarding claims 6, 15, 24, and 33, in addition to disclose the limitations regarding claims 1, 11, 20, and 29 discussed in the previous paragraphs, Iijima et al. further discloses the limitations that a TERMINAL MOVEMENT DETECTION SECTION 213 in co-operation with VLAN ALTERNATION REQUEST RECEIVING SECTION 18 for handling newly connected networking device with device identifying information (a detecting unit operable to detect a new network device and said receiving unit receives device identifying information); see fig. 1, and col. 11, lines 10-15, and lines 21-32.

Regarding claims 7, 16, 25, and 34, in addition to disclose the limitations regarding claims 6, 15, 24, and 33 discussed in the previous paragraph, Iijima et al. further discloses the limitations that a TERMINAL MOVEMENT DETECTION SECTION 213 in co-operation with VLAN ALTERNATION REQUEST RECEIVING SECTION 18 and DATATABASE UPDATE SECTION 16 for handling networking device removable (the detecting unit further detects one or more network devices that has been removed and said database updating unit deletes said corresponding device information); also see fig. 1, col. 11, lines 10-15, and col. 12, lines 5-10.

Regarding claims 9, 18, 27, and 36, in addition to disclose the limitations regarding claims 7, 16, 25, and 34 discussed in the previous paragraphs, Iijima et al. further discloses deleting the connecting port from the VLAN and deleting the VLAN after the last terminal has removed from the port (assigns a default VLAN group to a connection port of an interconnecting device corresponding to said network device detected by said detecting unit); see fig. 5, A31, and col. 24, lines 45-53.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 12, 21, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Pat. No. 6,223,218 issued to Iijima et al. in view of U. S. Pat. No. 6,085,238 issued to Yuasa et al.

Regarding claim 2, although Iijima et al. discloses the limitations regarding claim 1 discussed in the previous paragraphs, he does not disclose explicitly using the MAC address of a networking device as device identifying information.

Yuasa et al, however, discloses using the MAC address of a networking device as client address such that VLAN can be created; see figures 2 and 3, MAC ADDRESS[es], and col. 17, lines 27-28, and col. 19, lines 39-40.

Therefore, it would have been obvious to those having ordinary skill in the art, at the time of invention, to incorporate MAC address to create VLAN since MAC address is already in the header of a data-link layer frame. Hence, no extra header or tag, is needed to identify a VLAN as taught by Yuasa et al; see col. 17, lines 21-26.

Regarding claims 3, 12, 21, and 30, in addition to disclose the limitations regarding claims 1, 11, 20, and 29 discussed in the previous paragraphs, Yuasa et al. further discloses

- Receiving DESTINATION APPLICATION ADDRESS and SOURCE APPLICATION ADDRESS defined by the user or application software as client addresses to form a Custom LAN switch (further receives said user identifying information from said network device); see fig. 2, and col. 19, lines 45-50.
- Storing the client address as USER-DEFINED ADDRESS in the database (stores said device identifying information in said VLAN information database to correspond to said user identifying information and said VLAN group, in a case where said VLAN information database has already stored said user identifying information received by said receiving unit); see fig. 3, col. 19, lines 61-63, and col. 22, lines 55-65.

6. Claims 8, 17, 26, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Pat. No. 6,223,218 issued to Iijima et al. in view of U. S. Pat. No. 5,751,967 issued to Raab et al.

Regarding claims 8, 17, 26, and 35, although Iijima et al. discloses the limitations regarding claims 7, 16, 25, and 34 discussed in the previous paragraphs, he does not disclose explicitly the database updating unit deletes the corresponding device identifying

information from the VLAN information database when a predetermined time period has passed after detection that the network device has been removed or turned off.

Raab et al. discloses a time-out process wherein the node will only be indicated as deleted from given VLAN in the database if and only if they have been removed for some specified period of time; see col. 13, lines 7-16.

Therefore, it would have been obvious to those having ordinary skill in the art, at the time of invention, not to mark the networking device, in the database, has been removed from the network immediately after the removable since the networking device may be moving from one part of the network to another as taught by Raab; see col. 13, lines 1-6.

Allowable Subject Matter

7. Claims 5, 10, 14, 19, 23, 28, 32, and 37 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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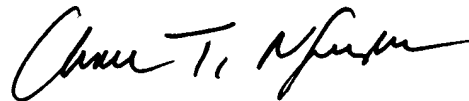
Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel K. Lam whose telephone number is (703) 305-8605. The examiner can normally be reached on Monday-Friday from 8:30 AM to 4:30 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

DKL: dkl *dkl*
February 17, 2004



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